REMARKS

This paper is in response to the official action dated January 24, 2008 (hereafter, "the official action"). This paper is timely filed as it is accompanied by a petition for extension of time and authorization to charge our credit card account in the amount of the requisite fee. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed, or which should have been filed herewith to our Deposit Account No. 13-2855, under Order No. 29610/CDT386.

Claims 1-17 are pending, but claim 5 has been withdrawn as directed to a non-elected invention. By the foregoing, claims 12 and 13 have been amended. The amendments to claims 12 and 13 merely relate to maters of form. No new matter has been added.

With respect to the statement at page 3 of the action that "it is required that all claims be amended to (the) elected group," the applicant respectfully submits that there is no proper basis for making such a requirement at this time. In this regard, the applicant respectfully submit that at least one generic claim, as pending, is patentable over the applied art for the reasons given herein, and thus the requirement is premature. Similarly, the objection to the specification for not including a title directed towards the elected group is premature.

The claim rejections are addressed below in the order presented in the official action. Reconsideration of the application, as amended and in view of the following remarks, is solicited.

CLAIM REJECTIONS 35 U.S.C. §112, 2nd PARAGRAPH

All examined claims 1-4 and 6-17 have been rejected as assertedly indefinite for reciting the term "substituent." The applicant respectfully traverses the rejections.

Initially, only claims 8-10 and 14 recite the term "substituent" (directly or indirectly). Thus, the indefiniteness rejections of claims 1-4, 6, 7, 11-13, and 15-17 is without any basis.

Additionally, a claim is considered definite as long as "the scope of the claims is clear so the public is informed of the boundaries of what constitutes infringement of the patent." *See* M.P.E.P. §2173. Here, one of ordinary skill would readily

understand the scope of the term "substituent" in view of the accompanying description and the teachings of the prior art.

Consistent with this assertion, the Office provided an accurate definition of the term, which in itself constitutes evidence regarding the understanding of one of ordinary skill in the art. Further, the term is not a relative term, as suggested by the Office, but rather is a well understood term of art in the chemical arts.

Moreover, literal support for the term "substituent" may be found, for example, at page 5 of the application, as filed. Given the knowledge in the art of beta di-ketone moieties in accordance with formula (II), and the understanding of the term "substituent" itself, it is respectfully submitted that the claimed subject matter is defined with a reasonable degree of preciseness. Nothing further is required.

Accordingly, the indefiniteness rejections should be withdrawn.

CLAIM REJECTIONS 35 U.S.C. §112, 1st PARAGRAPH

All examined claims 1-4 and 6-17 have also been rejected as assertedly not enabled. The applicant respectfully traverses the rejections.

While articulating this rejection, the Office acknowledged enablement where the metal is iridium and Ar^1, Ar^2, and L are phenyl and pyridinyl,[1] but indicated that the claimed methods are not enabled where the metal is selected from rhodium, platinum, and palladium, and Ar^1, Ar^2, and L are aryl and heteroaryl. The applicants respectfully submit that the exemplified disclosure set forth in the working examples may be extrapolated to other metals, diaryl ligands, and bidentate ligands, as claimed, in view of the general knowledge of one of ordinary skill in the art, as evidenced by the instant specification and (at least) the documents applied by the Office against the pending claims.

For example, claims 1-4, 6-12, and 15-17 are directed to methods of making metal complexes by reacting a halo-bridged dimer having a particular structure with a bidentate ligand L having a particular structure. Only specific metals, which are known to form halo-bridged dimers are recited in the claims (*see* the first full

[1] The comment at page 4 of the action that the claims are not enabled when the aryl moieties and L are simultaneously phenyl and pyridinyl is not understood. Clarification is requested.

paragraph under Scheme 1 on page 2). Additionally, methods of forming such halo-bridged dimers are explicitly described at page 2 of the instant specification and throughout the documents applied against the claims (as repeatedly noted in the action). Thus, the halo-bridged starting material is readily attainable, in contrast to the assertions set forth at pages 4 and 5 of the action.

Additionally, one of ordinary skill would immediately recognize that iridium and rhodium are isoelectronic species, and thus would have a reasonable expectation that these metals would behave similarly under similar conditions, i.e., that these metals form the same kinds of coordination complexes. Consistent with this assertion, the Office is respectfully directed to the very first paragraph of the Lamansky et al., *Inorg. Chem.,* 2001, *40*:1704-1711 (2001) document, which affirmatively demonstrates that these metals do in fact form the same kinds of coordination complexes.

As indicated above, platinum and palladium are also well known to form halo-bridged metal dimers. As these metals are isoelectronic, one of ordinary skill would have a reasonable expectation that they would behave similarly and form the same kinds of coordination complexes in view of established knowledge in the art.

Moreover, numerous iridium, rhodium, platinum, and palladium coordination complexes with a number of different ligands are specifically described, for example, in EP 1239526, which was applied by the examiner and is of record in this application. Additionally, the application itself discloses a number of diaryl moieties Ar^1-Ar^2, and enabling ligands, as claimed, at pages 11-12, and references WO 02/15645, as disclosing other examples of suitable diaryl moieties Ar^1-Ar^2, and enabling ligands, as claimed. Accordingly, the applicants respectfully submit that a large number of halo-bridged dimer complexes have been disclosed and/or are readily attainable in view of the prior art. Therefore, the exemplified disclosure of the working examples may properly be extrapolated to other metals, diaryl moieties Ar^1-Ar^2, and enabling ligands, as claimed, in view of the general knowledge of one of ordinary skill in the art, as evidenced by the instant specification and (at least) the documents applied by the Office against the pending claims.

Finally, the Dorwald reference cited to illustrate the unpredictability of organic synthesis is largely inapplicable. Organic synthesis is considerable different

from methods of forming metal complexes by ligand substitution reactions, as claimed.

In view of the above comments, the applicants respectfully submit that the enablement rejections have been overcome and should be withdrawn.

CLAIM REJECTIONS 35 U.S.C. §102

Additionally, all examined claims 1-4 and 6-17 have been variously rejected as anticipated by one or more of EP 1349435 A1 to Kamatani, EP 1239526 to Tsuboyama, Lamansky et al., *Inorg. Chem.*, 40:1704-1711 (2001), and International Patent Publication No. WO 02/15645 A1 to Lamansky *et al.* The applicant respectfully traverses the rejections.

Claims 1-4, 6-12, and 15-17

None of the cited art discloses or even suggests reacting a halo-bridged dimer complex according to formula (I) with a bidentate ligand L of formula Ar^1-Ar^2 in the presence of an enabling ligand, as claimed. Rather, each of the applied documents merely discloses reacting a halo-bridged dimer with a bidentate ligand such as acetylacetone ("acac"), picolinic acid ("pic"), or an alkylsalicylimine ("sal"), to break the stable chloro-bridged dimer and form a monomeric complex. The applied art specifically teaches that the monomeric complex must then be further reacted in a separate step with a second bidentate ligand, which is capable of forming at least one carbon-to-metal bond with the metal of the complex to obtain metal complex of formula $M(Ar^1Ar^2)_nL$. Thus, the prior art invariably involves two steps to form the desired metal complexes.

While acac, pic, and sal can be interpreted as enabling ligands capable of breaking the halogen bridge of the complexes, they are not bidentate ligands capable of forming at least one carbon-to-metal bond with the metal. This explains why the art invariably discloses the obtained monomeric complexes must be further reacted to obtain the desired product $M(Ar^1Ar^2)_nL$. *See*, for example, Lamansky et al., *Inorg. Chem.*, 40:1704-1711 (2001), at page 1707, which discloses "The $C\hat{}N_2$Ir(acac) complexes can then be used to prepare Ir$C\hat{}N_3$."

Accordingly, these documents do not disclose reacting said dimer with said bidentate ligand in the presence of an enabling ligand capable of breaking the halogen bridge of the complex according to formula I, as claimed.

Claim 13

The applied documents also do not disclose forming said halo-bridged dimer and then reacting same with a reactive ligand capable of breaking the halogen bridge in a one pot process, as recited in claim 13.

Claim 14

The applied documents do not disclose reacting a metal halide with a ligand according to formula (II) in the presence of a metal-free base of sufficient strength to derotonate the compound of formula (II).

Furthermore, in order to anticipate any of the pending claims, the applied documents must disclose each and every feature *as arranged* in the claims. *See, e.g., Net Moneyin Inc. v. Verisign, Inc.*, Appeal No. 07-1565, Slip Op. at 15-16 (Fed. Cir. Oct. 20, 2008) ("[O]ur precedent informs that the 'arranged as in the claim' requirement applies to all claims and refers to the need for an anticipatory reference to show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order."); *see also*, *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989) ("The identical invention must be shown in as complete detail as is contained in the patent claim."). There are no examples in any of the applied documents that can meet this standard. Consequently, anticipation rejections cannot be sustained..

For at least the foregoing reasons, the rejections should be removed.

CONCLUSION

It is submitted that the application is in condition for allowance. Should the examiner wish to discuss any matter of form or procedure in an effort to advance this application to allowance, the examiner is respectfully invited to telephone the undersigned attorney at the indicated telephone number.

Respectfully submitted,

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